

Title (en)

Method of speech recognition using variational inference with switching state space models

Title (de)

Spracherkennungsverfahren das Variationsinferenz mit veränderlichen Zustandsraummodellen benutzt

Title (fr)

Méthode pour la reconnaissance de parole utilisant de l'inférence variationnelle avec des modèles d'espace d'état changeants

Publication

**EP 1465154 A3 20070606 (EN)**

Application

**EP 04007985 A 20040401**

Priority

US 40516603 A 20030401

Abstract (en)

[origin: EP1465154A2] A method is developed which includes 1) defining a switching state space model for a continuous valued hidden production-related parameter and the observed speech acoustics, and 2) approximating a posterior probability that provides the likelihood of a sequence of the hidden production-related parameters and a sequence of speech units based on a sequence of observed input values. In approximating the posterior probability, the boundaries of the speech units are not fixed but are optimally determined. Under one embodiment, a mixture of Gaussian approximation is used. In another embodiment, an HMM posterior approximation is used.

IPC 8 full level

**G10L 15/14** (2006.01); **G10L 15/06** (2013.01); **G10L 15/10** (2006.01)

CPC (source: EP KR US)

**B01D 21/2433** (2013.01 - KR); **B01D 21/245** (2013.01 - KR); **C02F 1/40** (2013.01 - KR); **G10L 15/14** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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